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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,907	09/29/2000	Steven M. Bennett	042390.P9766	8975

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EXAMINER	
HAN, QI	

ART UNIT	PAPER NUMBER
2654	9

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/675,907	BENNETT, STEVEN M.	
	Examiner	Art Unit	
	Qi Han	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-29 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3,6-8.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

on page 17, lines 6-8, the ending parenthesis is missing. Appropriate correction is required.

Claim Objections

2. Claims 4, 17 and 23 are objected to because of the following:

Regarding claim 4, the limitation of "a reduction of non-speech audio components" lacks support in the specification (see the closest disclosure on page 10, line 20: "reduces false barge-in occurrences"). Appropriate correction is required.

Regarding claims 17 and 23, the limitation of "to recognize communications from the user" lacks support in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Rejection under 35 U.S.C. 102(e), Patent Application Publication or Patent to Another with Earlier Filing Date, in view of American Investors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application of patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Woods et al. (US 6,510,417 B1), hereinafter referenced as Woods.

Regarding **claim 1**, Woods discloses a system and method for voice access to internet-based information (title), comprising:

a voice user interface possessing both operational characteristics and security characteristics, (column 6, lines 31-58 and Figs.1-3, 'voice portal 10 includes a user interface' that 'coordinates voice communications between voice portal 10 and the user' and 'can be either via speech, via internet or "world wide we", via a wireless application protocol, ...', which is interpreted as operational characteristics; column 24, lines 31-47, 'uses caller ID as means of identifying the user', 'response verbally ...to give his or her PIN', 'authentication is made', which is interpreted as security characteristics);

a database to store user-specific contextual information, (Fig. 5 and column 2, lines 30-37, 'database... stores information regarding users'); and

a computer program to use the user-specific contextual information to dynamically change the operational characteristics of the voice user interface (column 2, lines 50-67, 'computer readable program code' 'for communicating information by voice to the user' and 'for communicating information responsive to the voice information'; column 9, line 24 through column 10, line 3, 'support personalization features (user-specific contextual information) to improve customers experience with the service', 'to support any adaptation of service ...',

'preferences are dynamic, changing based on user's actions... user are able to override all passive preferences... by setting or resetting either through voice or web interfaces').

Regarding **claim 7** (depending on claim 1), Woods further discloses an identity of the user; and a current location of the user, (Fig.5; column 24, line 39, 'caller-ID as means of identifying the user'; column 10, lines 20-21, 'user's location', 'a current call location').

Regarding **claim 8** (depending on claim 1), Woods further discloses an identity of the user; and a current task of the user, (Fig.5; column 24, line 39, 'caller-ID as means of identifying the user'; column 13, lines 9-16, 'each time a customer (user) entered a new and different vertical domain of interest, an instance of the preference object to the vertical domain's user's is created with preference data inserted', which is interpreted as current task of the user').

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woods in view of Brown et al. (US 6,574,601 B1), hereinafter referenced as Brown.

Regarding **claim 2** (depending on claim 1), even though Woods teaches the uses of "barge-in" (column 9, lines 37-52), Woods does not expressly disclose that the changed operational characteristic of the voice user interface is a setting of a barge-in level. However,

this feature is well known in the art as evidenced by Brown who discloses an acoustic speech recognition recognizer system and method title), comprising using continuously adapted (set) barge-in thresholds (column 1, lines 35-55). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing using adapted (set) barge-in thresholds, as taught by Brown, for the purpose of avoiding badgering of the speech processor (Brown: column 1, lines 39-40).

Regarding **claim 4** (depending on claim 1), as best understood in view of claim objection (see above), Woods does not expressly disclose a reduction of non-speech audio components in the processing of a communication from the user. However, this feature is well known in the art as evidenced by Brown who discloses an acoustic speech recognition recognizer system and method title), comprising a barge-in detector for increasing a threshold used in comparing the signal levels and the noise levels (column 1, lines 52-55), which suggest reducing false barge-in occurrences. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing a mechanism for increasing the barge-in threshold, as taught by Brown, for the purpose of avoiding badgering of the speech processor (Brown: column 1, lines 39-40).

5. Claims 3, 5-6, 9-12 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woods in view of Alpdemir (US 2002/0035474 A1).

Regarding **claim 3** (depending on claim 1), Woods does not expressly disclose the changed operational characteristic of the voice user interface is a generation of a grammar file. However, this feature is well known in the art as evidenced by Alpdemir who discloses an

acoustic speech recognition recognizer system and method (title), comprising the grammar files that are compiled (generated) to create a grammar library and providing for "dynamic grammars" (paragraphs 188-200). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing a mechanism for generating grammar file, as taught by Alpdemir, for the purpose of providing dynamic grammars (Alpdemir: paragraph 200).

In addition, Woods discloses rule (herein interpreted as grammar) writers 1010 to select from a variety of forms provided by data organizing tool 1025 to use in the retrieval of information from particular web sites (column 17, lines 6-17, Figs 10 and 27), which also corresponds to the claimed "generation of a grammar file", by a broader view of Woods' teaching and interpretation of the claim.

Regarding **claim 5** (depending on claim 1), Woods does not expressly disclose to dynamically change the security characteristics of the voice user interface. However, this feature is well known in the art as evidenced by Alpdemir who discloses that voice recognition can be used to authenticate the business user in addition to the password depending on (dynamically) the quality of the speech recognition technologies used and the quality of the line or other communication ling[e] connecting the business user to the system at the time (paragraph 212), which suggests dynamically changing the security characteristics as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing dynamic authentication using voice recognition, as taught by Alpdemir, for the purpose of providing additional verification information (Alpdemir: paragraph 212).

Regarding **claim 6** (depending on claim 5), Woods in view of Alpdemir further discloses a biometric analysis to authenticate an identity of the user, (Alpdemir: paragraph 212, 'voice recognition', 'voice print').

Regarding **claim 9** (depending on claim 1), Woods does not expressly disclose the computer program to change the security characteristics of the voice user interface based upon the sensitivity of the information being communicated to the user. However, this feature is well known in the art as evidenced by Alpdemir who discloses that for business user the authenticity of the attempted registrations can be verified with reasonable assurances (paragraph 211) and that voice recognition can be used to authenticate the business user in addition to the password depending on (dynamically) the quality of the speech recognition technologies used and the quality of the line or other communication ling[e] connecting the business user to the system at the time (paragraph 212), which suggests that business user may have more sensitive content to be communicated and may need additional verifying step. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing additional voice recognition authentication for communicating business related information (sensitive), as taught by Alpdemir, for the purpose of providing verification with reasonable assurances for business user (Alpdemir: paragraph 212).

Regarding **claim 10** (depending on claim 1), Woods does not expressly disclose to use environmental information to dynamically change the security characteristics of the voice user interface. However, this feature is well known in the art as evidenced by Alpdemir who discloses that voice recognition can be used to authenticate the business user in addition to the password depending on (dynamically) the quality of the speech recognition technologies used

and the quality of the line or other communication ling[e] (environmental information) connecting the business user to the system at the time (paragraph 212), which suggests using environmental information to dynamically change the security characteristics as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing environmental information to dynamically change the security characteristics, as taught by Alpdemir, for the purpose of providing additional verification information (Alpdemir: paragraph 212).

Regarding **claim 11** (depending on claim 10), Woods in view of Alpdemir further discloses an addition of an authentication step to authenticate an identity of the user, (Alpdemir: paragraph 212, 'voice recognition can be used to authenticate the business user in addition to ...the password').

Regarding **claim 12** (depending on claim 10), Woods in view of Alpdemir further discloses the environmental information is communicated to the system by the user, (Alpdemir: paragraph 212, '...depending on ... the quality of the line or other communication ling[e] (environmental information) connecting the business user to the system at the time', which suggests that the environmental information is necessary to be communicated to the system).

Regarding **claim 24**, it recites a machine-readable medium. The rejection is based on the same reason described for claims 1 and 5 because the claim recites same or similar limitation(s) as claims 1 and 5.

Regarding **claims 25-26** (depending on claim 24), the rejection is based on the same reason described for claims 10 and 9 respectively, because claims 25-26 recite same or similar limitation(s) as claims 10 and 9, respectively.

6. Claims 13, 15-23 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woods in view of Alpdemir and further in view of Brown.

Regarding **claim 13** (depending on claim 10), Woods in view of Alpdemir does not expressly disclose that the environmental information comprises audio scene information at the location of the user. However, this feature is well known in the art as evidenced by Brown who discloses using a background energy level estimator 70 (Figs. 3) and the background noise (column 3, lines 43-60), which suggests that the environmental information includes audio scene, as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods in view of Alpdemir by specifically providing audio scene as environmental information, as taught by Brown, for the purpose of estimating noise levels in the speech data (Brown: column 1, lines 51-52).

Regarding **claim 15**, Woods discloses a system and method for voice access to internet-based information (title), comprising:

barging-in a voice processing system by using user-specific contextual information (column 9, lines 37-52, 'the use of a "barge-in" can signify a more advanced user and a string of barge-in selections to a single sub-tree repeatedly for a specific user (corresponding to user-specific contextual information) may advantageously be detected by customer management subsystem');

security requirements of a voice processing system that the system requires from the user based upon user-specific contextual information, (column 24, lines 31-47, 'uses caller ID as

means of identifying the user', 'response verbally ...to give his or her PIN', 'authentication is made').

But, Woods does not expressly disclose changing the security requirements based upon user-specific contextual information. However, this feature is well known in the art as evidenced by Alpdemir who discloses that for business user the authenticity of the attempted registrations can be verified with reasonable assurances (paragraph 211) and that voice recognition can be used (changed) to authenticate the business user in addition to the password (paragraph 212), which suggests that business user may have specific security concerns regarding the contextual information (herein interpreted a user-specific contextual information). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods by specifically providing additional voice recognition authentication for business specified user, as taught by Alpdemir, for the purpose of providing verification with reasonable assurances for business user (Alpdemir: paragraph 212).

Further, Woods in view of Alpdemir does not expressly disclose changing a barge-in level. However, this feature is well known in the art as evidenced by Brown who discloses using continuously adapted (changed) barge-in thresholds (column 1, lines 35-55). Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods in view of Alpdemir by specifically providing changing barge-in thresholds, as taught by Brown, for the purpose of avoiding badgering of the speech processor (Brown: column 1, lines 39-40).

Regarding **claim 16** (depending on claim 15), Woods in view of Alpdemir in view of Brown further discloses changing the barge-in level of the system by using environmental

information, (Brown: column 1, lines 52-55 'estimating noise levels (environmental information)', 'a barge-in detector for increasing a threshold used in comparing the signal levels and the noise levels').

Regarding **claim 17** (depending on claim 15), as best understood in view of claim objection (see above), the rejection is based on the same reason described for claim 3 because the claim recites same or similar limitation(s) as claim 3.

Regarding **claim 18** (depending on claim 15), the rejection is based on the same reason described for claim 6 because the claim recites same or similar limitation(s) as claim 6.

Regarding **claim 19** (depending on claim 15), the rejection is based on the same reason described for claim 10 because the claim recites same or similar limitation(s) as claim 10.

Regarding **claim 20** (depending on claim 15), the rejection is based on the same reason described for claim 9 because the claim recites same or similar limitation(s) as claim 9.

Regarding **claims 21-23**, they recite an apparatus (device), which corresponds to the method claims 15-17, respectively. The rejection is based on the same reason described for claims 15-17 respectively, because claims 21-23 recite same or similar limitation(s) as claims 15-17, respectively.

Regarding **claims 27-29**, they recite a machine-readable medium, which corresponds to the method claims 15-17, respectively. The rejection is based on the same reason described for claims 15-17 respectively, because claims 27-29 recite same or similar limitation(s) as claims 15-17, respectively.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woods in view of Alpdemir in view of Brown and further in view of Lewis et al. (US 6,324,499 B1) hereinafter referenced as Lewis.

Regarding **claim 14** (depending on claim 13), Woods in view of Alpdemir in view of Brown does not expressly disclose comparing the audio scene characteristics at the user's location to known references and selecting the matching environmental scene. However, this feature is well known in the art as evidenced by Lewis who discloses noise recognition for speech recognition systems (title), comprising mapping (matching) frequent randomly occurring noises such as background office noise (audio scene) or personal noises, recoding noises, identifying certain non-speech sound (column 1, line 56 through column 2, lines 30), which suggests that the environmental information includes audio scene, as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at time the invention was made to modify Woods in view of Alpdemir in view of Brown by specifically providing mapping background noise (audio scene) as environmental information, as taught by Lewis, for the purpose of preventing randomly occurring noise to be interpreted as a spoken word (Lewis: column 1, lines 64-65).

Conclusion

8. Any response to this office action should be mailed to:
Commissioner of Patents and Trademarks, P.O. Box 1450, Alexandria, VA22313-1450
or faxed to:
(703)-872-9314
Hand-delivered responses should be brought to:
Crystal Park II, 2121 Crystal Drive, Arlington. VA. Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to I Han whose telephone numbers is (703) 305-5631. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7: p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richmond Devil, can be reached on (703) 305-6954.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

QH/qh
June 10, 2004

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER